We claim:

1. A method of increasing expression of FHOS in a subject comprising administering to the subject a FHOS activator, such that FHOS expression is increased.

2. The method of claim 1, wherein FHOS mRNA levels are increased

3. The method of claim 1, wherein FHOS protein levels are increased.

4. A method of treating diabetes in a subject comprising administering to the subject a FHOS activator.

5. The method of claim 4, wherein the subject is suffering from type II diabetes.

6. A method of treating insulin resistance in a subject comprising administering to the subject a FHOS activator.

7. The method of any one of claims 1-6, wherein the FHOS activator is selected from the group consisting of a FHOS nucleic acid molecule, a plasmid comprising a FHOS nucleic acid molecule, a FHOS adenovirus and a FHOS retrovirus.

8. The method of any one of claims 1-6, wherein the FHOS activator is selected from the group consisting of a FHOS protein or biologically active portion thereof, an antibody or biologically active portion thereof, a peptide, a peptidimetic, a non-peptide oligomer and a small molecule.

9. A method for identifying a compound suitable for use in treating diabetes or insulin resistance in a subject, said method comprising contacting a cell capable of expressing FHOS mRNA with a test compound and determining the effect of the test compound on expression of FHOS mRNA, wherein a stimulatory effect is indicative of

the compound being suitable for use in treating diabetes or insulin resistance in said subject.

10. A method for identifying a compound suitable for use in treating diabetes or insulin resistance in a subject, said method comprising contacting a cell capable of expressing FHOS protein with a test compound and determining the effect of the test compound on expression of FHOS protein, wherein a stimulatory effect is indicative of the compound being suitable for use in treating diabetes or insulin resistance in said subject.

11. A method for identifying a compound suitable for use in treating diabetes or insulin resistance in a subject, said method comprising contacting a cell which expresses FHOS protein with a test compound and determining the effect of the test compound on a biological activity of the FHOS protein, wherein a stimulatory effect is indicative of the compound being suitable for use in treating diabetes or insulin resistance in said subject.

12. A method for identifying a compound suitable for use in treating diabetes or insulin resistance in a subject, said method comprising contacting a FHOS protein or biologically active portion thereof with a test compound and determining the effect of the test compound on a biological activity of the FHOS protein or portion, wherein a stimulatory effect is indicative of the compound being suitable for use in treating diabetes or insulin resistance in said subject.

13. A compound identified by the method of any one of claims 9-12.

14. The compound of claim 13 formulated with a pharmaceutically-acceptable carrier.

15. A method of treating diabetes in a subject comprising administering to the subject compound identified by the method of any one of claims 9-12.

16. The method of claim 15, wherein the subject is suffering from type II diabetes.

17. A method of treating insulin resistance in a subject comprising administering to the subject a compound identified by the method of any one of claims 9-12.

18. A method of increasing FHOS expression or activity in a cell comprising contacting said cell with a FHOS activator.

19. A method of increasing FHOS expression or activity in a cell comprising contacting said cell with a compound identified by the method of any one of claims 9-12.

20. A pharmaceutical composition comprising a cell which overexpreses FHOS protein and a pharmaceutically-acceptable carrier.

21. The method of any one of claims 18-20, wherein the cell is a muscle cell or a precursor thereof.

22. The method of any one of claims 18-20, wherein the cell is an adipocyte or a precursor thereof.

23. A method of treating a subject having diabetes or an insulin-resistant subject comprising obtaining cells from said subject, treating said cells with an FHOS activator, and administering said treated cells to said subject such that diabetes or insulin-resistance in said subject is treated.

24. The method of claim 23, wherein the FHOS activator is selected from the group consisting of a FHOS nucleic acid molecule, a plasmid comprising a FHOS nucleic acid molecule, a FHOS adenovirus, and a FHOS retrovirus.